

WHAT IS CLAIMED IS:

1. An information processing apparatus for transmitting information to a transmission party via a network in predetermined units, said information processing apparatus comprising:

first transmission means for transmitting first information to said transmission party via said network in said units;

receiving means for receiving, from said transmission party, receiving information about the reception of said first information transmitted by said first transmission means;

clocking means for clocking the time from when said first information is transmitted;

determination means for determining whether or not the time clocked by said clocking means exceeds a reference value; and

second transmission means for retransmitting said first information when said determination means determines that the time clocked by said clocking means does not exceed said reference value and for transmitting second information when said determination means determines that the time clocked by said clocking means exceeds said reference value, in a case where said received information received by said receiving

means indicates that said transmission party has not yet received said first information.

2. An information processing apparatus according to Claim 1, wherein said units are packets.

3. An information processing apparatus according to Claim 2, further comprising dividing means for dividing information for individual first packets into information for individual second packets, wherein said first and second transmission means transmit said information by using said second packet as units.

4. An information processing apparatus according to Claim 3, further comprising setting means for setting a flag indicating that the time clocked by said clocking means exceeds said reference value when determined by said determination means.

5. An information processing apparatus according to Claim 4, further comprising:

writing means for writing said flag into said second information which is transmitted by said second transmission means when said flag is set by said setting means; and

clearing means for clearing said flag when all of said

second packets which form one of said first packets are transmitted to said transmission party.

6. An information processing method for use with an information processing apparatus for transmitting information to a transmission party via a network in predetermined units, said information processing method comprising:

a first transmission step of transmitting first information to said transmission party via said network in said units;

a receiving step of receiving, from said transmission party, receiving information about the reception of said first information transmitted in said first transmission step;

a clocking step of clocking the time from when said first information is transmitted;

a determination step of determining whether or not the time clocked in said clocking step exceeds a reference value; and

a second transmission step of retransmitting said first information when said determination step determines that the time clocked in said clocking step does not exceed said reference value and for transmitting second information when said determination step determines that the time clocked in

said clocking step exceeds said reference value, in a case where said received information received in said receiving step indicates that said transmission party has not yet received said first information.

7. A recording medium having recorded thereon a computer-readable program in a case where a computer controls an operation of transmitting information to a transmission party via a network in predetermined units, said program comprising:

a first transmission step of transmitting first information to said transmission party via said network in said units;

a receiving step of receiving, from said transmission party, receiving information about the reception of said first information transmitted in said first transmission step;

a clocking step of clocking the time from when said first information is transmitted;

a determination step of determining whether or not the time clocked in said clocking step exceeds a reference value; and

a second transmission step of retransmitting said first information when said determination step determines that the time clocked in said clocking step does not exceed said

reference value and for transmitting second information when said determination step determines that the time clocked in said clocking step exceeds said reference value, in a case where said received information received in said receiving step indicates that said transmission party has not yet received said first information.

8. A program in a case where a computer controls an operation of transmitting information to a transmission party via a network in predetermined units, said program comprising:

a first transmission step of transmitting first information to said transmission party via said network in said units;

a receiving step of receiving, from said transmission party, receiving information about the reception of said first information transmitted in said first transmission step;

a clocking step of clocking the time from when said first information is transmitted;

a determination step of determining whether or not the time clocked in said clocking step exceeds a reference value; and

a second transmission step of retransmitting said first information when said determination step determines that the

time clocked in said clocking step does not exceed said reference value and for transmitting second information when said determination step determines that the time clocked in said clocking step exceeds said reference value, in a case where said received information received in said receiving step indicates that said transmission party has not yet received said first information.

9. An information processing apparatus for receiving information, transmitted via a network, for individual second packets which are created by dividing information of individual first packets, said information processing apparatus comprising:

receiving means for receiving said information transmitted for each of said second packets via said network;

storage means for storing, for each of said first corresponding packets, information for each of said second packets received by said receiving means;

assembling means for assembling information for each of said second packets stored in said storage means into information for each of said first packets before being divided;

first deletion means for deleting said second packet, stored in said storage means, corresponding to said first

assembled packet when said second packet is assembled into said first corresponding packet by said assembling means;

determination means for determining whether or not a predetermined flag is contained in the information received by said receiving means; and

second deletion means for deleting said second packet, stored in said storage means, corresponding to said first packet which is prior to said first packet to which said second packet in which said flag is contained corresponds when said determination means determines that said flag is contained in the information received by said receiving means.

10. An information processing method for use with an information processing apparatus for receiving information, transmitted via a network, for individual second packets which are created by dividing information for individual first packets, said information processing method comprising:

a receiving step of receiving said information transmitted for each of said second packets via said network;

a storing step of storing, for each of said first corresponding packets, information for each of said second packets received in said receiving step;

an assembling step of assembling information for each of said second packets, stored in said storing step, into information for each of said first packets before being divided;

a first deletion step of deleting said second packet, stored in said storing step, corresponding to said first assembled packet when said second packet is assembled into said first corresponding packet in said assembling step;

a determination step of determining whether or not a predetermined flag is contained in the information received in said receiving step; and

a second deletion step of deleting said second packet, stored in said storing step, corresponding to said first packet which is prior to said first packet to which said second packet in which said flag is contained corresponds when said determination step determines that said flag is contained in the information received in said receiving step.

11. A recording medium having recorded thereon a computer-readable program for causing a computer to perform an operation of receiving information, transmitted via a network, for individual second packets which are created by dividing information for individual first packets, said program comprising:

a receiving step of receiving said information

transmitted for each of said second packets via said network;

a storing step of storing, for each of said first corresponding packets, information for each of said second packets received in said receiving step;

an assembling step of assembling information for each of said second packets, stored in said storing step, into information for each of said first packets before being divided;

a first deletion step of deleting said second packet, stored in said storing step, corresponding to said first assembled packet when said second packet is assembled into said first corresponding packet in said assembling step;

a determination step of determining whether or not a predetermined flag is contained in the information received in said receiving step; and

a second deletion step of deleting said second packet, stored in said storing step, corresponding to said first packet which is prior to said first packet to which said second packet in which said flag is contained corresponds when said determination step determines that said flag is contained in the information received in said receiving step.

12. A program for causing a computer to perform an operation of receiving information, transmitted via a

network, for individual second packet which are created by dividing information for individual first packets, said program comprising:

a receiving step of receiving said information transmitted for each of said second packets via said network;

a storing step of storing, for each of said first corresponding packets, information for each of said second packets received in said receiving step;

an assembling step of assembling information for each of said second packets, stored in said storing step, into information for each of said first packets before being divided;

a first deletion step of deleting said second packet, stored in said storing step, corresponding to said first assembled packet when said second packet is assembled into said first corresponding packet in said assembling step;

a determination step of determining whether or not a predetermined flag is contained in the information received in said receiving step; and

a second deletion step of deleting said second packet, stored in said storing step, corresponding to said first packet which is prior to said first packet to which said second packet in which said flag is contained corresponds when said determination step determines that said flag is

contained in the information received in said receiving step.

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